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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

TODD, GREGORY G

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2157

DATE MAILED: 05/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/484,098

Applicant(s)

BAKER ET AL.

Examiner

Gregory G Todd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This is a second office action in response to applicant's amendment filed, 19 February 2003, of application filed, with the above serial number, on 18 January 2000 in which claims 11, 2, 8, 11-12, 18, and 21 have been amended and claims. Claims 1-21 are therefore pending in the application.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a) the gateway intercepting control and maintenance information; b) IP addresses and headers must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-13, and 15-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnan (hereinafter "Krishnan", 6,157,950).

3. As per Claims 1 and 11, Krishnan discloses an apparatus and a method for use in interfacing a local network to one or more external network elements, wherein Krishnan discloses:

a gateway coupled between the local network and the one or more external network elements, the gateway being operative to determine remotely-assigned address information for a given device attached to the local network (at least col. 3, lines 17-33; col. 5, lines 30-34);

establish, based at least in part on the remotely assigned address information, a substitution address for use by at least one other device attached to the local network when communicating with the given device (performing subnet masking operation on IP address to derive subnet address) (at least col. 7 line 59 - col. 8 line 9).

4. As per Claims 2 and 12.

the remotely-assigned address information comprises an Internet protocol (IP) address assigned to the at least one device by an external network element (at least col. 7, lines 59-64).

5. As per Claims 3 and 13.

the local network comprises a local area network (LAN) (at least col. 7, lines 59-64).

6. As per Claims 5 and 15.

the gateway stores remotely-assigned address information for each of a plurality of devices (computers 42 and 43) attached to the local network (at least col. 7, lines 22-30).

7. As per Claims 6 and 16.

the gateway stores a set of address substitution information for each of the plurality of devices, the set of address substitution information for a given one of the devices comprising an address to be used by the given device in communicating with the gateway (substituting IP address of gateway for computer 42 or 43) (at least col. 7, lines 31-42), and addresses to be used by the given device in communicating with each of the other devices (local IP addresses for each device connected to the LAN) (at least col. 9 line 61 - col. 10 line 26)

8. As per Claims 7 and 17.

the stored information comprises an address substitution matrix having a row of address information for each of the plurality of devices attached to the local network (internal LAN address database table) (at least col. 3, lines 28-33).

9. As per Claims 8 and 18.

a given one of the sets of address substitution information for a particular one of the plurality of devices comprises a set of IP addresses, each of which is sub-network compatible with an IP address remotely assigned to the corresponding device, such that communications between the given device and another one of the devices attached to

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the local network are not routed through an external network element (gateway with a subnet) (at least col. 7, lines 17-21; col. 5, lines 38-64).

10. As per Claims 9 and 19.

the gateway processes a particular received packet in order to replace remotely-assigned address information in a header thereof with a corresponding substitution address determined by the gateway (subnet addressing) (at least col. 5, lines 10-12, 38-64).

11. As per Claims 10 and 20.

the gateway intercepts at least one of control information and maintenance information received over the local network and associated with the given device so as to perform related services on behalf of the given device (at least col. 2, lines 39-46).

12. As per Claim 21, Krishnan discloses a machine-readable medium storing one or more programs, wherein Krishnan discloses:

determining, in a gateway coupled between the local network and the one or more external network elements, remotely-assigned address information for a given device attached to the local network (at least col. 3, lines 17-33; col. 5, lines 30-34);

establishing a substitution address for use by at least one other device attached the local network when communicating with the given device, based at least in part on the remotely-assigned address information (performing subnet masking operation on IP address to derive subnet address) (at least col. 7 line 59 - col. 8 line 9).

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13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Foley (hereinafter "Foley", 6,414,952).

15. Krishnan does not explicitly disclose the gateway comprising an ADSL termination unit-receive device (ADSL modem). However, the use and advantages for using such a modem is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Foley (at least Foley col. 16, lines 42-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of specifically an ADSL modem in Krishnan's gateway because this would expand the compatibility of the modems used in his gateway (at least col. 4, lines 17-25; col. 7, lines 48-52) with ADSL services.

Response to Arguments

16. Applicant's arguments filed 19 February 2003 have been fully considered but they are not persuasive. The applicant argues that Krishnan does not disclose the features of the claims, namely the features of claims 1, 11, and 21. The applicant argues that a.) Krishnan does not disclose determining remotely-assigned address information for a given device attached to the local network; and b.) Krishnan does not disclose establishing, based at least in part of the remotely-assigned address

information, a substitution address for use by at least one other device attached to the local network when communicating with the device.

In response to a.); The claim language states "determine remotely-assigned address information" for a computer on the LAN. Krishnan clearly teaches this limitation in the original cited portion. Krishnan's system has the gateway modify all outgoing data packets to appear as if originating from the gateway, and in doing so, reading and thus determining the origin/source address of outgoing packet. Krishnan goes on in the same paragraph (col. 3, lines 16-33), to state looking up the LAN address of the originating computer and also an administrator (remote to computers (42 and 43)) assigning said IP addresses (see col. 7, lines 11-21), further showing determining the remotely-assigned address information.

In response to b.); The claim language states "establish...a substitution address for use" by a computer on the LAN when communicating with the gateway. Krishnan clearly teaches this in the cited portion, as Krishnan discloses substituting its own source address, thereby establishing another address, of the gateway here, to substitute for the computer's original address. The applicant further argues Krishnan does not teach this substitution being based on the remotely-assigned address information. However, the broad nature of the claim only suggests that an incoming packet for the gateway being substituted when coming from the LAN itself, and not from the outside networks (eg. Internet), thus the substitution occurring and being based on the computer being on the LAN and having the remotely-assigned address.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Zisapel et al, Subramaniam et al, Howes et al, Millet et al, and Weiman as well as newly cited Nonaka et al (packet substitution gateways) and Datta et al (multiple routers controllable by address configuring gateway) are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G Todd whose telephone number is (703)305-5343. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703)308-7562. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.



gt
April 21, 2003



**SALEH NAJJAR
PRIMARY EXAMINER**